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(71) Applicant: **SANYO ELECTRIC CO LTD**

(72) Inventor: **IKEDA KONOSUKE**
YAMASHITA ETSURO
NAKAJIMA HITOSHI

(74) Representative:

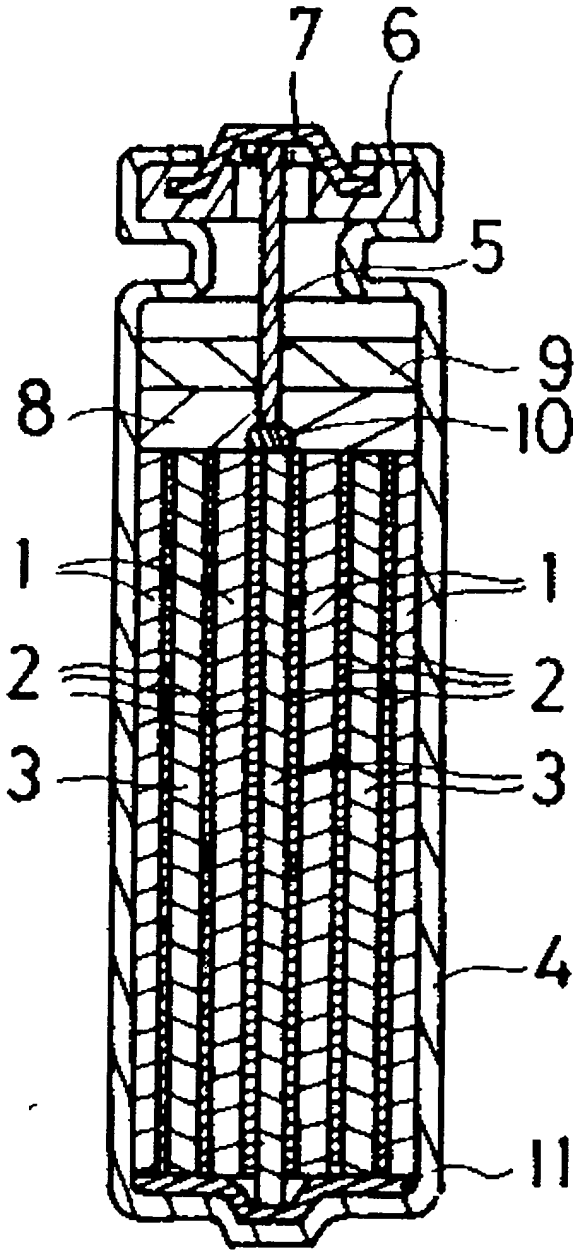
(54) NONAQUEOUS ELECTROLYTE BATTERY

(57) Abstract:

PURPOSE: To obtain a nonaqueous electrolyte battery which is safe even under a condition of high temperature by providing the battery with a negative electrode containing a light metal as an active material, a positive electrode corresponding to the negative electrode and a nonaqueous-system electrolyte and adding a high-boiling-point inactive substance which is in a fluid form at over 150° C.

CONSTITUTION: A positive electrode 1 consists of manganese dioxide used as an active material, acetylene black used as a conductive agent and polytetrafluoroethylene used as a binding agent. A negative electrode 3 consists of lithium. After the flexible belt- like positive electrode 1, a separator 2 made of a nonwoven polypropylene fabric and the negative electrode 3 are laid one upon another, this is rolled in spiral form before being inserted in a positive exterior can 4 made of a stainless steel. Next, the negative

electrode 3 located in the center of the spiral body is spot-welded through a tab 5 to a negative current collector cap 7 unified with an insulator 6. Electrolyte 8 consists of solution prepared by dissolving lithium perchlorate in propylene carbonate. In such a nonaqueous electrolyte battery, a phase consisting of liquid paraffin 9 used as a high-boiling-point inactive substance which is in liquid form at over 150°C is formed above the electrolyte 8. Owing to the above constitution, any exothermic combustion of the battery can be prevented even when the electrolyte 8 effuses from the battery.



Title: **JP60025157A2: NONAQUEOUS ELECTROLYTE BATTERY**

Country: **JP** Japan
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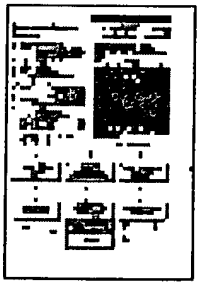
Inventor(s): **IKEDA KONOSUKE**
YAMASHITA ETSURO
NAKAJIMA HITOSHI



Applicant/Assignee: **SANYO ELECTRIC CO LTD**

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Abstract:

Purpose: To obtain a nonaqueous electrolyte battery which is safe even under a condition of high temperature by providing the battery with a negative electrode containing a light metal as an active material, a positive electrode corresponding to the negative electrode and a nonaqueous-system electrolyte and adding a high-boiling-point inactive substance which is in a fluid form at over 150° C.

Constitution: A positive electrode 1 consists of manganese dioxide used as an active material, acetylene black used as a conductive agent and polytetrafluoroethylene used as a binding agent. A negative electrode 3 consists of lithium. After the flexible belt- like positive electrode 1, a separator 2 made of a nonwoven polypropylene fabric and the negative electrode 3 are laid one upon another, this is rolled in spiral form before being inserted in a positive exterior can 4 made of a stainless steel. Next, the negative electrode 3 located in the center of the spiral body is spot-welded through a tab 5 to a negative current collector cap 7 unified with an insulator 6. Electrolyte 8 consists of solution prepared by dissolving lithium perchlorate in propylene carbonate. In such a nonaqueous electrolyte battery, a phase consisting of liquid paraffin 9 used as a high- boiling-point inactive substance which is in liquid form at over 150°C is formed above the electrolyte 8. Owing to the above constitution, any exothermic combustion of the battery can be prevented even when the electrolyte 8 effuses from the battery.

Family: Show known family members

Other Abstract Info: none

Foreign References: No patents reference this one